DOCUMENT RESUME

ED 233 239 CE 800 014

AUTHOR Schwaller, Anthony E.
TITLE Teaching Strategies in Technology Education.
PUB DATE [Apr 83]
NOTE 3p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Learning Theories; Opinion Papers; Postsecondary Education; Secondary Education; Student Needs; *Teaching Methods; *Technical Education; *Technology
IDENTIFIERS Blooms Taxonomy; PF Project

ABSTRACT

Teachers of technology education need to relate their teaching strategies to learning theory, student needs, and Bloom's taxonomy. In learning, students take in information and apply it to the real world through accommodation. Teaching strategies must allow for this process of accommodation. Student needs involve sustenance (physiological needs), influence (control over others), and self-extension (extending oneself beyond the present). If these needs are met, positive feelings will result. Bloom's taxonomy consists of the psychomotor, cognitive, and affective domains. Not only must the teacher address all three domains, but the higher levels within each domain as well. There are many teaching strategies available to the technical education teacher. The successful teacher will include as many as possible, selecting particular strategies based on the needs of the moment. (DC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED233239

TEACHING STRATEGIES IN TECHNOLOGY EDUCATION

By

Dr. Anthony E. Schwaller

A great amount of research has recently been done in our field to help teachers define "Technology Education," to determine exactly what is the content of "Technology Education," and to lay out the advantages and disadvantages of teaching technology education. However, one aspect has been missing in this research, and that is "How To Teach Technology Education." The purpose of this presentation is to help the instructor apply various teaching strategies to learning theory, student needs, and Bloom's taxonomy. As teachers become more involved with "The Teaching of Technology Education," these major components of teaching must be interrelated to the various styles and methods used in the classroom. It is true that those teachers wanting to teach "Technology Education" must alter or change their style of teaching to become a successful "Technology Education" teacher.

Learning theory must first be addressed. In the simplest form, learning can be defined as a process in which students take in information through assimilation and further apply the information to the real world through accommodation. More specifically, teachers begin by giving the student information or data, concepts, and knowledges. The information is then put into schemes. This occurs when the information is taken to the real world, tried out or experienced. Our teaching strategies must allow for the continuous "process of accommodation." When teaching "Technology Education" this becomes a primary ingredient.

Student needs also become a significant part in the total study of teaching "Technology Education." Student needs, which are different for each student in the classroom, can be understood by defining three categories of needs: 1) sustenance, 2) influence, and 3) self extension. Sustenance can be defined as conditions essential to one's maintenance which included primarily physiological needs. Influence is defined as control or doing things to other people, including such needs as status, significance, position, expertise, importance, etc. Self extension is defined as the process of extending oneself beyond the present, and can be illustrated by needs of creativity. If these needs are addressed and met, then positive feelings are the result. If not, then negative feelings are the result. "Technology Education" teachers must make every effort to design their strategies to help meet student needs.

The third component is a review of Bloom's Taxonomy. Bloom's taxonomy includes three domains: 1) psychomotor, 2) cognitive, and 3) affective. In the past, our field has been associated primarily with the psychomotor and low/level cognitive domain. However, in "Technology Education" all three domains should be a major component. Looking more specifically at the cognitive domain, the

CE800014

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

ANTHONY E. SCHWALLER

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

knowledge, comprehensive and application levels are many times as far as teachers go in the classroom. But the levels of analysis, synthesis, and evaluation are also of equal importance. In fact, if one analyzes where most people operate in real life situations, it is in the last three domains. Again, "Technology Education" must strive to work toward analysis, synthesis, and evaluation levels to become successful. The affective domain is often overlooked as well because it is often subjective. However, as "Technology Education" teachers, we know that many decisions in real life are made in the affective domain. Successful teachers should develop teaching strategies to allow the students to work in all three domains and at the higher levels within each domain.

Finally, there are many teaching strategies available to teachers today. For example, lecture, demonstrations, project methods, discussion/questioning, lab activity, games & inquiry are all acceptable teaching strategies. Teachers have heard of all of these and tried many of them in the classroom. But which are used most? Usually the lecture and project method.

Relating these strategies to: 1) learning theory, 2) student needs, and 3) Bloom's Taxonomy should be the primary goal of the "Technology Education" teacher. For example, it becomes rather obvious that lectures only help assimilate information. The teacher must also provide for accommodation. Another example shows that demonstrations usually allow for the teacher to accommodate, but the students don't accommodate until they actually try the concepts being demonstrated. The teacher must select the correct teaching strategy for this experience to occur. The following questions might then be asked of the remaining teaching strategies. "How do they relate to learning theory, student's needs, and Bloom's Taxonomy?"

It becomes rather obvious that after each has been defined, the best teaching method is selecting all of the teaching methods. Depending on the content, type of class restrictions, and other considerations, the successful "Technology Education" teacher will design his/her instruction to include as many of the teaching strategies as possible.

In summary, the roots of successful instruction in "Technology Education" is to interrelate the principles and concepts of learning theory, student needs, and Bloom's Taxonomy to various styles of teaching including questioning, lab activity, games, projects, demonstrations, lectures, etc. If this is done, then "Technology Education" teacher will have successful instruction into the future.